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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,763	03/26/2004	Robert Roberts	04-5502	7651
39820	7590	01/24/2005	EXAMINER	
EDWARD M. LIVINGSTON, PA 963 TRAIL TERRACE DRIVE NAPLES, FL 34103			BECK, DAVID THOMAS	
			ART UNIT	PAPER NUMBER

1732

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/810,763	ROBERTS, ROBERT	
	Examiner	Art Unit	
	David T. Beck	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) 44-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 and 55-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of invention 1 in the reply filed on 11/8/04 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Objections

2. Claim 34 is objected to because of the following informalities: The word "extrusion" appears to be misspelled as "extursion". The examiner construes this word to read as "extrusion". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. Claims 10, 11, 13-15, 17-22, and 24-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims include the term "additives" but the specification fails to define the term or give examples of what constitutes an additive as opposed to what constitutes a filler.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

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patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 5, 6, 9-30, 38-43, 55, 56, 58, 60 and 61 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No. 3,556,161. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would be obvious to one skilled in the art to combine the claims in the '161 patent to reach the various combinations disclosed in applicant's claims. Claim 5 is considered to be an open ended claim and is broader than the product claim of the patent and therefore encompasses the product claim and all the dependant claims therefrom. Applicant's claims 5-27 are treated as product by process claims and therefore only product limitations in the claims are being considered.

With regard to claim 5, the '161 reference teaches a polytetrafluoroethylene Sheet which is molecularly oriented parallel to the face of the sheet in claim 1.

With regard to claim 6, the '161 reference teaches rolling in claim 26.

With regard to claims 9-11, the '161 reference teaches a filler with a size of less than 25 microns in claim 24.

With regard to claims 12-15, the '161 reference teaches the sheet is in tubular form in claim 3.

With regard to claims 16-19, the '161 reference teaches the sheet is in laminate form in claim 4.

With regard to claims 20-30, the '161 reference teaches the tensile strength of the sheet exceeds 5,000 psi in claim 6.

With regard to claim 38, the '161 reference teaches a biaxially-oriented tube containing fillers in claims 1 and 3.

With regard to claim 39, the '161 reference teaches a biaxially-oriented sintered tube containing fillers in claims 1, 3 and 26.

With regard to claim 40, the '161 reference teaches a biaxially-oriented tube containing additives in claims 1, 3, and 14.

With regard to claim 41, the '161 reference teaches a biaxially-oriented sintered tube containing additives in claims 1, 3, 14 and 26.

With regard to claim 42, the '161 reference teaches fillers in claim 1.

With regard to claim 43, the '161 reference teaches fillers in claim 1.

With regard to claim 55, the '161 reference teaches porous membrane structure of biaxially-oriented polytetrafluoroethylene with void content up to 90 percent containing fillers in claim 1.

With regard to claim 56, the '161 reference teaches a porous membrane structure of biaxially-oriented polytetrafluoroethylene with void content up to 90 percent containing polymer additives in claims 9 and 14.

With regard to claim 58, the '161 reference teaches laminate layers in claim 4.

With regard to claim 60, the '161 reference teaches a tensile strength of more than 5,000 psi in claim 6.

With regard to claim 61, the '161 reference teaches a tensile strength of more than 5,000 psi in claim 6.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-43 and 55-61 are rejected under 35 U.S.C. 102(b) as being anticipated by Roberts (3,556,161).

With regard to claim 1, Roberts teaches a method of processing colloidal size polytetrafluoroethylene resin particles to produce biaxially-oriented (column 1, lines 15-17) structures comprising the steps of: taking a uniaxially-oriented paste extrusion extrudate in the hydrostatic pressure coalescible state (column 9, lines 55-71), and applying a means of stress on the uniaxially-oriented (column 8, line 32) paste extrusion extrudate at approximately 90 degrees to the original extrusion direction (column 8, lines 39-42).

With regard to claim 2, Roberts teaches the means of applying stress is rolling (column 8, lines 40-41).

With regard to claim 3, Roberts teaches the means of applying stress is calendaring (column 16, lines 33-37).

With regard to claim 4, Roberts teaches means of applying stress is blowing (column 1, lines 54-56).

With regard to claim 5, Roberts teaches a biaxially-oriented polytetrafluoroethylene sheet made from uniaxially-oriented (column 8, line 32) past extrusion extrudate in the hydrostatic pressure coalescible state (column 9, lines 55-71) produced by applying a means of stress in that extrudate 90 degrees to the original extrusion direction (column 8, lines 39-42).

With regard to claim 6, Roberts teaches the means of applying stress is rolling (column 8, lines 40-41).

With regard to claim 7, Roberts teaches the means of applying stress is calendaring (column 16, lines 33-37).

With regard to claim 8, Roberts teaches means of applying stress is blowing (column 1, lines 54-56).

With regard to claim 9, Roberts teaches the sheet contains particulate filler less than 25 microns in size (column 3, lines 3-5).

With regard to claims 10 and 11, Roberts teaches the sheet contains particulate additive less than 25 microns in size (column 12, lines 25-27, additive is carbon black with 0.05 micron particle size).

With regard to claims 12-15, Roberts teaches the sheet is in tubular form (column 9, lines 62-67).

With regard to claims 16-19, Roberts teaches the sheets are in laminate form (column 1, lines 56-59)

With regard to claims 20-30, Roberts teaches the sheets have a tensile strength that exceeds 5,000 psi (column 1, lines 59-63).

With regard to claim 31, Roberts teaches a method of forming a biaxially-oriented (column 1, lines 15-17) hydrostatic pressure coalescible sheet (column 1, lines 34-49) comprising the steps of: taking a biaxially-oriented hydrostatic pressure coalescible sheet; applying a means of force to form a complex shape (column 8, lines 65-68).

With regard to claim 32, Roberts teaches the means of applying force is stretching the sheet (column 8, lines 65-68, sheet is drawn).

With regard to claim 33, Roberts teaches the means of applying force is compression (column 8, lines 68-69).

With regard to claim 34, Roberts teaches the means of applying force is extrusion (column 9, line 67).

With regard to claim 35, Roberts teaches applying heat up to 300 degrees Centigrade to plasticize and assist the forming and shaping the hydrostatic pressure coalescible biaxially-oriented structures (column 7, lines 1-13, heat to 250 degrees C). The examiner construes the phrase "applying heat up to 300 degrees Centigrade" to mean heating to a temperature less than or equal to 300 degrees Centigrade.

With regard to claim 36, Roberts teaches a method of producing a biaxially-oriented tube (column 10, lines 1-6) comprising the step of blow molding (column 1, lines 54-56) a uniaxially-oriented hydrostatic pressure coalescible tube. The tube will be inherently uniaxially-oriented upon being blow molded.

With regard to claim 37, Roberts teaches a method of producing a biaxially-oriented sintered (column 10, line 8) tube (column 10, lines 1-6) comprising the step of blow molding (column 1, lines 54-56) a uniaxially-oriented hydrostatic pressure

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coalescible tube. The tube will be inherently uniaxially-oriented upon being blow molded.

With regard to claim 38, Roberts teaches a biaxially-oriented (column 1, line 17) tube (column 9, line 68) containing fillers (column 3, line 4).

With regard to claim 39, Roberts teaches a biaxially-oriented (column 1, line 17) sintered (column 10, line 8) tube (column 9, line 68) containing fillers (column 3, line 4).

With regard to claim 40, Roberts teaches a biaxially-oriented (column 1, line 17) tube (column 9, line 68) containing additives (column 4, lines 1-32).

With regard to claim 41, Roberts teaches a biaxially-oriented (column 1, line 17) sintered (column 10, line 8) tube (column 9, line 68) containing additives (column 4, lines 1-32).

With regard to claims 42 and 43, Roberts teaches fillers (column 3, line 4).

With regard to claim 55, Roberts teaches a porous membrane structure of biaxially-oriented polytetrafluoroethylene with void content up to 90 percent (claim 8) containing fillers (column 3, line 4).

With regard to claim 56 Roberts teaches a porous membrane structure of biaxially-oriented polytetrafluoroethylene with void content up to 90 percent (claim 8) containing polymer additives (column 4, lines 1-32).

With regard to claim 57, Roberts teaches polymer additives (column 4, lines 1-32).

With regard to claim 58, Roberts teaches laminant layers (column 1, lines 55-59).

With regard to claim 59, Roberts teaches different pore sizes (column 4, lines 1-49).

With regard to claims 60 and 61, Roberts teaches a tensile strength which exceeds 5,000 psi (column 1, lines 60-61).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David T. Beck whose telephone number is 571-272-2942. The examiner can normally be reached on Monday - Friday, 8AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on 517-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MICHAEL P. COLAIANNI
SUPERVISORY PATENT EXAMINER

DTB
January 19, 2005

DTB